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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,206	08/20/2003	Dan Hardesty	03-015 US	5464
23418	7590	07/15/2005	EXAMINER	
VEDDER PRICE KAUFMAN & KAMMHOLZ 222 N. LASALLE STREET CHICAGO, IL 60601			CHURCH, CRAIG E	
			ART UNIT	PAPER NUMBER
			2882	

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/644,206

Applicant(s)

HARDESTY, DAN

Examiner

Craig E. Church

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-68 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiu et al (5369678). Chiu teaches an automated x-ray imaging system comprising:

x-ray source 14/5

source collimator 20

fovea filter with iris aperture 22

collimator/filter position control 46

patient support 12

digital image detector 3

source/detector support 7

image processor 11

computer 13

disk memory (figure 6)

monitor 15

This system automatically tracks the tip of a catheter as it is moved through a patient and adjusts imaging parameters for each exposure based on image data

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acquired in the previous exposure. Lines 64-68 of column 14 to line 2 of column 15 explain:

As has been previously discussed, during a fluoroscopic procedure, x-ray radiation is detected and converted into an image signal by a fluoroscopic image intensifier assembly. The data contained by the image signal can be used to compute control commands that assist in the use of the present x-ray dosage reduction method.

As depicted in figure 6 these commands include:

movement of the collimator/filter (lines 40-47 of column 16)

adjustment of filter iris (lines 44-48 of column 9)

adjustment of dose via kv and ma (lines 18-21 of column 14)

adjustment of magnification/resolution (lines 21-25 of column 14 and lines 54-56 of column 16)

transition region intensity correction (lines 49 et seq of column 11)

Applicant's arguments filed May 2, 2005 have been fully considered but they are not persuasive. The position that Chiu maintains constant radiation characteristics (pages 24-25 of the amendment) is unsupported by the Chiu disclosure and appears to exist only in applicant's imagination:

In contrast to this, Chiu et al. expressly teaches exposure of a subject region with what amounts to a single X-ray radiation dose, i.e., one X-ray radiation exposure which, although it transitions from a full dosage in the center to reduced dosages extending radially outward from the center, it nonetheless remains constant in its radiation characteristics. As expressly taught in Chiu et al, it is important—for the technique of Chiu et al.—that this single X-ray radiation exposure with constant radiation characteristics be maintained so as to allow the user to “visualize the entire field of view for the purposes of orientation and placement, except that now the areas in the viewed image outside the point of interest are of lower quality.” Column 2, lines 59-62.

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Lines 59-62 of Chiu cited by applicant are absolutely silent as to constant radiation characteristics. This is a gross misrepresentation of the patent which might be regarded by some as fraud on the Office.

In fact, Chiu's system automatically tracks the tip of a catheter as it is moved through a patient and adjusts imaging parameters for each exposure based on image data acquired in the previous exposure. Lines 64-68 of column 14 to line 2 of column 15 explain:

As has been previously discussed, during a fluoroscopic procedure, x-ray radiation is detected and converted into an image signal by a fluoroscopic image intensifier assembly. The data contained by the image signal can be used to compute control commands that assist in the use of the present x-ray dosage reduction method.

As depicted in figure 6 these commands include:

movement of the collimator/filter (lines 40-47 of column 16)

adjustment of filter iris (lines 44-48 of column 9)

adjustment of dose via kv and ma (lines 18-21 of column 14)

adjustment of magnification/resolution (lines 21-25 of column 14 and lines 54-56 of column 16)

transition region intensity correction (lines 49 et seq of column 11)

Consequently, applicant's argument is totally without merit.

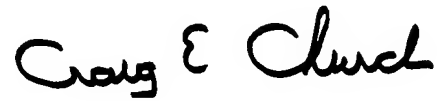
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Examiner Church at telephone number (571) 272-2488.

A handwritten signature in black ink that reads "Craig E Church". The signature is written in a cursive, slightly slanted style.

Craig E. Church  
Senior Examiner  
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